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Hi Don,

Enclosed is your copy of KEYWORD V6.0, the latest and greatest
version. Actually I messed up in the IKI article in refering to
Keyword V2.0, shoulda been V6.0. When writing the article, I
forgot that the latest version is V6.0 and not V2.0.

The version of KEYWORD that you have is probably a very early
one, and as you suspect, it was probably improperly saved. The
latest version is not fussy about when it gets saved, and is in
all ways much better than the original. Will there be a V7.0?
Well, probably... if and when I think of any improvements.

The only real problem with KEYWORD V6.0 (and all earlier
versions) is that it's not compatible with BASIC programs which
use non-relocatable machine-code in a REM statement. Right now
I can't think of any solution to that problem other than
modifying such BASIC programs, or rather, the code in their REM
statements.

You'll note that no eprom or schematics of the IKI are enclosed.
That's because, since the article was written, I have come up
with some ideas for improvements to the IKI design, and I want
to try those out before (more or less) finalizing the design.

You WILL get the IKI eprom and documemtation as soon as I'm sure
that they are as good as they can be, for the present.

I have great plans for the future. I have finally (after years
of effort) succeeded in modifying my DEVPAC assembler and
disassembler so that they can cope with LARGE machine-code
programs. It is now possible, for the first time ever, to
re-source, re-write and re-assemble LARGE machine-code programs,
such as Mscript, the Larken DOS, and the 2068 and Spectrum ROMs.
I will now be able to do things that I have only dreamed of
being able to do. Great things are coming, in the fullness of
time, and yes, Timex/Sinclair still lives!

                            Best regards,

                            Jack

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**** KEYWORD V6.0 ****

-- for Oliger Disk and 2068 or Spectrum --

WHAT IT DOES: KEYWORD allows you to write and edit BASIC
programs without having to change cursor modes or hunt for
keywords on the keyboard. KEYWORD is very handy in case you have
a non-standard keyboard without keywords on the keys.

LOADING KEYWORD: Reset the computer, then:

    LOAD /"KWORD"

The BASIC loader loads and activates the KEYWORD machine code,
lets you make a backup if desired, and provides a few reminders
of how to use Keyword.

Once KEYWORD in activated, you may write, load, edit or run
other software. On the 2068, the BASIC loader can be deleted
with the command   DELETE ,   or   DELETE 1,9999. The Spectrum
lacks the DELETE command, so to erase the BASIC you might load
a short "dummy" program. Don't use NEW, since this would erase
KEYWORD.

When KEYWORD has been loaded and activated, it resides in memory
below the BASIC program, and is transparent to the user.

Another method of loading KEYWORD is to load just the machine
code, with the command LOAD /"KW6" CODE
Then PRINT USR 60000 to activate KEYWORD, one time only.
The BASIC loader isn't really needed, and is more of an
introduction.

MEMORY USAGE
Once the KEYWORD machine-code has been loaded and activated,
memory from 60000 to 60999 is free for other uses. KEYWORD then
occupies locations 23885 to 24297 on the 2068, or 23755 to 24155
on the Spectrum. KEYWORD cannot be saved and reloaded from these
locations directly and still work.

KEYWORD will remain available for use until a NEW command is
given or the computer is turned off. CLEAR will not harm it.

TURNING KEYWORD OFF/ON
You may turn KEYWORD off or on as often as you like, by pressing
SYMBOL-SHIFT + ENTER. This is best done when you are not in the
middle of editing a BASIC statement or line.

When Keyword is turned off or on, you will hear a low-pitched
beep if it was turned OFF, or a high-pitched beep if it was
turned ON.

USING KEYWORD
When Keyword is OFF, the computer operates just as usual.
When Keyword is ON, the K, L and C cursors are replaced with
Keyword's own special cursor ">" or "<". It is irrelevant
whether ">" or "<" appears as the cursor. Unfortunately the
status of CAPS LOCK cannot be reported by the cursor.

You can get the E and G cursors in the usual manner. Thus, with
Keyword ON, you can still use extended-mode keywords and
graphics mode, and imbedded screen controls. SYMBOL-SHIFT may
still be used for keywords like AT. But "main keywords" (that
is, those on the centers of the keys, such as PRINT) must be
typed in, using the ">" cursor.

Though you MAY use extended mode or symbol-shift for keywords
such as STOP or CAT, you don't HAVE to. ALL keywords may be
spelled out, including those used by your disk system, both in
immediate command, and when writing or editing BASIC lines.
Exception: when typing the OPEN # keyword, type only OPEN and
not the '#' symbol. See note on last page.

When you press ENTER, any keywords that you have typed in
accordance with the rules below will be 'tokenized' into their
standard Sinclair forms.

KEYWORD SYNTAX RULES
1. Keywords may be typed in upper or lower case.

2. Keywords must be spelled correctly. Thus, RANDOMISE will
   cause a syntax error. RANDOMIZE is correct.

3. There must be a space between a keyword and anything
   following it. Thus Print :Print is correct, while
   PRINT: PRINT is incorrect.

4. There may be, but need not be, spaces BEFORE a keyword. Thus
   10go to 100 is quite legal, as is
   10   GO TO   100

5. LONG KEYWORDS of more than 4 characters may be shortened by

   typing only the first 4 (or more) characters. Thus,
   rand or Random produce RANDOMIZE, but Randim would be wrong,
   since it violates Rule 2. Whatever you type must be correct.

KEYWORD SYNTAX ERRORS are indicated by a flashing question mark
after the first letter of the erroneous keyword. Editing is as
usual, to correct the error. The most common error is not typing
a SPACE after a keyword.

COMPATIBILITY: KEYWORD is compatible with all disk sytems, and
with MOST software, including OS-64 and Mscript. If you find
something it won't work with, please let me know. I may be able
to help.

Keyword moves the BASIC program area upward in memory, by 6
bytes on the 2068 and by 400 bytes on the Spectrum. Therefore,
Keyword cannot be used with any program which requires the
system variable PROG to be at its standard turn-on value, or
with programs which use non-relocatable machine code in a Line
1 or Line 0 REM statament.

The TECHNICAL DETAILS of how Keyword works are beyond the scope of this document. Though the machine code is short, its interleave with the operating system is extremely complex. The source listing of the Keyword machine code is available to those who need it, on paper or disk (Devpac format), for $5.

I believe that KEYWORD V5 is bug-free, but if you should experience any problems with it, please let me know. Thanks!

**** CORRECT SPELLING OF 2068 KEYWORDS ****
(shown in upper case just for clarity)

ABS	CLS	FREE	LOAD	POINT	STEP
ACS	CODE	GO SUB	LPRINT	POKE	STICK
ASN	CONTINUE	GO TO	MOVE	PRINT	STOP
AND	COPY	IF	NEW	RANDOMIZE	STR$
AT	COS	IN	NEXT	READ	SQR
ATN	DATA	INK	NOT	REM	TAB
ATTR	DEF FN	INKEY$	ON ERR	RESET	THEN
BEEP	DELETE	INPUT	* OPEN #	RESTORE	TO
BIN	DIM	INT	OR	RETURN	VAL
BORDER	DRAW	INVERSE	OUT	RND	VAL$
BRIGHT	ERASE	LEN	OVER	RUN	VERIFY
CAT	EXP	LET	PAPER	SAVE	<=
CHR$	FLASH	LINE	PAUSE	SCREEN$	<>
CIRCLE	FN	LIST	PEEK	SGN	>=
CLEAR	FOR	LLIST	PI	SIN	
CLOSE #	FORMAT	LN	PLOT	SOUND	

Examples of shortened keywords:

open	= OPEN #	inver	= INVERSE
dele	= DELETE	scre	= SCREEN$
rest	= RESTORE	circ	= CIRCLE
rand	= RANDOMIZE	clos	= CLOSE #
bord	= BORDER	inkey	= INKEY$
brig	= BRIGHT	cont	= CONTINUE
prin	= PRINT	veri	= VERIFY

NOTE *: In the special case of the "OPEN #" keyword, you should NOT type the '#' symbol! Thus, with Keyword ON, you should type 'open 4' to get OPEN #4. This is because Keyword V6.0 sees a space after 4 characters as the end of the keyword.

VERSION NOTES: Keyword V6.0 replaces V5.0 and corrects a bug in V5.0 which prevented four-letter keywords terminating in a punctuation mark (such as CHR$ and VAL$) from being recognized as valid keywords.

*** end ***